REMARKS

Applicants acknowledge the Final Action of 27 JUL. 2009 and request reconsideration of the claims, as amended. Main claim 1 has been amended to incorporate features which are described on specification page 6. The lubricant circulation loop is illustrated in FIG. 2. At the bottom, there is a lubricant reservoir 64. From there, the lubricant rises longitudinally upward along shaft 34, lubricating the bearing points of the shaft, then is directed by undercut surface 112, flows along the inner wall of bearing tube 38 to sintered bearing 36, and finally returns to reservoir 64.

In paragraphs 70-77 of the Action, the Office has cited the TAKAHASHI reference in connection with claim 23 (as originally worded). The TAKAHASHI lubrication loop is similar in some respects. The lubricant is flung outward by a portion 58a of rotor 52, and is partially caught by an annular felt disk 45 (col. 4, line 34).

TAKAHASHI's bearing tube 12 has a free end with a special cap 46, as may be seen in FIGS. 4 & 5. This cap 46 is secured on the upper end of bearing tube 12. For this purpose, there is an annular groove 12b; see FIG. 5.

The lubricant is accelerated by part 46c on cap 46, then reaches disk 45, and from there passes to sintered bearing 34 and back to axial bearing 20.

TAKAHASHI in col. 5, lines 46-58, describes his assembly sequence. Outward protrusions 58a of rotor 50 are pressed down over bent cylindrical wall 46d of cap 46, so that 46d is deformed outward and protrusions 58a are deformed radially inward.

Col. 6, lines 33-45, describe the sequence for disassembly for maintenance or repair. The wall 46d has cutaway portions 46d1, shown in FIGS. 4-7, and rotor 50 has special protrusions 58a, which are shown in FIGS. 5-7.

Whenever, the shaft 56 is to be removed for cleaning or repair, the protrusions 58a are rotated to align with the cutaways or recesses 46d1, as shown in FIGS. 5-7. The vertical arrow in FIG. 5 shows the motion upward. If the rotor 60 is rotated with respect to flange or bracket 10 of the motor, according to TAKAHASHI (line 38) the cutaways 46d1 are expanded elastically in the circumferential direction and "the inner daimeter of the bent cylindrical wall 46d is expanded.

Thus, the protrusions 58a can slide upward through cutaway portions 46d1. The locking of shaft 56 is released, and the shaft can be pulled out of bearing 34b.

This mode of operation is rather implausible and, in any case, depends upon the fan maintenance person having precise knowledge of the inner structure of the fan, so that he knows exactly what steps to take, and in what sequence.

A fan consumer who **lacks** this precise knowledge would, in the typical case, pull upward at the wrong time, until cap 46 comes off bearing tube 12. In other words, the consumer would destroy the fan, for example by ripping off protrusions 58a. The TAKAHASHI structure is complicated, impractical, and far from sufficiently robust.

By contrast to TAKAHASHI, the present invention, as recited in claim 1, provides a simple and robust way to assemble and disassemble the motor. No special knowledge or "tricks of the trade" are needed to pull shaft 34 out of the bearing for maintenance. The structure recited in claim 1 (and incorporated by reference in the dependent claims) is neither suggested nor made obvious by TAKAHASHI or the other cited references. Rather, TAKAHASHI leads in a different, impractical direction, diametrically opposite to the present invention.

CONCLUSION

Claim 1, and its dependent claims, are now clear and patentably distinguish over TAKAHASHI, ONO, HORNG, and the other art of record, taken singly or in combination. If the Examiner notes any remaining informalities, or wishes to make any suggestions to place the application in condition for allowance, a telephone call to Applicant's counsel is invited.

Respectfully submitted,

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